6/3,AB/17 (Item 11 from file: 351) DIALOG(R)File 351:Derwent WPI (c) 2003 Thomson Derwent. All
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003982798
WPI Acc No: 1984-128342/198421
XRAM Acc No: C84-054068
XRPX Acc No: N84-094959
Cathode prodn. for cell with non-aq. electrolyte - esp. lithium manganese dioxide cell from synthetic manganese dioxide, conductor and binder, pref. PTFE
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Number of Countries: 012 Number of Patents: 008
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 3242139	A	19840517	DE 3242139	A	19821113	198421	B
JP 59101767	A	19840612	JP 83207631	A	19831107	198429	
NO 8303863	A	19840604				198429	
DK 8305169	A	19840625				198432	
EP 116115	A	19840822	EP 83109381	A	19830921	198434	
DE 3242139	C	19840906				198437	
EP 116115	B	19860521				198621	
JP 91024023	B	19910402	JP 83207631	A	19831107	199117	

Priority Applications (No Type Date): DE 3242139 A 19821113
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3242139	A		16		
EP 116115	A	G			

Designated States (Regional): BE CH FR GB IT LI NL SE

EP 116115	B	G			

Designated States (Regional): BE CH FR GB IT LI NL SE
Abstract (Basic): EP 116115 A

A process for the production of positive electrodes for electro-chemical elements with nonaqueous electrolytes, especially Li/MnO2-cells, in which manganese dioxide is used as the active material, which is admixture with a conducting medium and a matrix is formed into the electrode and is subjected to a final heat treatment,

characterised in that, a synthetic manganese dioxide with a delta-crystal structure is used, which after production of the moulded article is subjected to the final heat treatment between 180 deg. C and below 200 deg.C.

(12pp)

DE 3242139 A

The MnO2 is used as active material. Process involves forming a mixt. with a conductive material and a binder into an electrode and heating this. Novelty is that synthetic MnO2 with rhocrystal structure is used and heating is carried out between 180 deg.C and under 200 deg.C.

Process is simple and gives an electrode with high capacity down to temps. as low as -30 deg.C and also increased storage stability.

Pref. mixt. of (40-60 (wt.)%) MnO2, (3-8%) C black, (4-8%) MeOH, (2-6%) PTFE in aq. suspension and water is made into a paste by strring and/or kneading, then formed, pressed onto an expanded metal (Al) mesh and dried during the single heat treatment. It is pref. to prepare a homogeneous mixt. of 45-55 (50)% MnO2 and 4-6 (5)% C black (conductive furnace black) and make this into a paste by stirring with 6-7 (6.5)% MeOH, 4-5 (4.5)% PTFE and Ca. 34% water.

Abstract (Equivalent): EP 116115 B

A process for the production of positive electrodes for electro-chemical elements with nonaqueous electrolytes, especially Li/MnO2-cells, in which manganese dioxide is used as the active material, which is admixture with a conducting medium and a matrix is formed into the electrode and is subjected to a final heat treatment, characterised in that, a synthetic manganese dioxide with a delta-crystal structure is used, which after production of the moulded article is subjected to the final heat treatment between 180 deg. C and below 200 deg.C. (12pp)